

CRISPIN & BRENNER, P.L.L.C.

1156 15TH STREET, N.W.

SUITE 1105

WASHINGTON, D.C. 20005

(202) 828-0152

(202) 828-0158 (FAX)

EX PARTE OR LATE FILED

WRITER'S DIRECT NO.

ORIGINAL

(202) 828-0155

December 21, 2001

RECEIVED

MAR 15 2002

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

BY HAND

Ms. Magalie R. Salas
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

**Re: Written Ex Parte Presentation
CC Docket No. 94-102**

Dear Ms. Salas:

On behalf of my client QUALCOMM Incorporated ("QUALCOMM"), this is to provide the Commission with the attached press releases and news article providing additional information regarding the world's first nationwide launch in Japan of commercial wireless position location service using QUALCOMM's gpsOne position location technology over the KDDI cellular system. KDDI is now selling three handset models, each of which contain QUALCOMM's MSM3300 chipset, which incorporates the gpsOne technology for position location service. With these handset models, QUALCOMM's gpsOne location solution software, and the related equipment, KDDI now has the world's first nationwide, wireless commercial position location system.

The three gpsOne-enabled handsets sold by KDDI were manufactured by Kyocera, Hitachi, and Toshiba, respectively, each of whom is a QUALCOMM licensee. Currently, over 20 handset vendors around the world are developing and selling gpsOne-enabled handsets. QUALCOMM expects that by the end of the first quarter of 2002, four handset vendors will be shipping gpsOne-enabled handsets here in the United States.

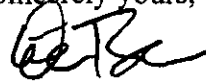
Moreover, the attached materials explain that KDDI is offering a host of innovative location-based services, which involve approximately 20 different applications, all of which utilize QUALCOMM's gpsOne position location technology. As QUALCOMM has stated previously in this proceeding, its position location technology works with all major air interfaces, operates in all environments, indoors or outdoors and urban, suburban, and rural, has been

No. of Copies rec'd 0
List ABCDE

broadly licensed to chipset manufacturers and handset vendors, and will support E911 service and a wide variety of other safety-enhancing services.

The attached materials demonstrate in vivid terms that the technology and the equipment now exist to provide automatic location information for the over 100,000 calls each day to 911 centers in the United States to enhance the safety of the American public. This technology and equipment is now deployed commercially throughout Japan, and QUALCOMM looks forward to the completion of such nationwide deployments here in the United States.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'D. Brenner', written over the closing 'yours,'.

Dean R. Brenner
Attorney for QUALCOMM Incorporated

cc: Chairman Michael Powell
Commissioner Kevin Martin
Commissioner Kathleen Abernathy
Commissioner Michael Copps
Thomas Sugrue, Esq.
Kris Monteith, Esq.
Thomas Navin, Esq.



[Site Map](#) - [Finance Home](#) - [Yahoo!](#) - [Help](#)



[[Latest Headlines](#) | [Market Overview](#) | [News Alerts](#)]

Thursday December 20, 7:32 am Eastern Time

Press Release

SOURCE: QUALCOMM Incorporated

QUALCOMM CDMA Technologies' gpsOne Technology Supports World's First Nationwide Launch of GPS Solutions on Wireless Phones by KDDI in Japan

QCT's Chipset and System Software Enables Commercial Deployment of KDDI's "GPS Keitai" Handsets and "eznavigation" Services

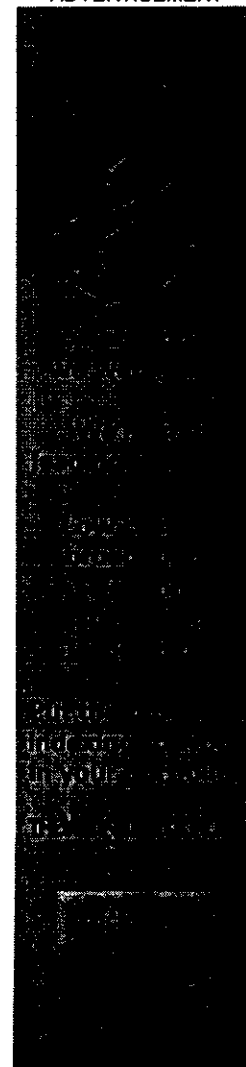
SAN DIEGO--(BUSINESS WIRE)--Dec. 20, 2001-- QUALCOMM Incorporated (Nasdaq: QCOM - news), pioneer and world leader of Code Division Multiple Access (CDMA) digital wireless technology, today announced the first nationwide launch in Japan, beginning in December 2001, of gpsOne(TM)-enabled handsets and their associated position location service plans by KDDI Corporation. The three handsets offered by KDDI -- the C3001H, C3002K and C5001T -- are powered by the QUALCOMM CDMA Technologies (QCT) MSM3300(TM) Mobile Station Modem (MSM(TM)) chipset and gpsOne wireless Global Positioning System (GPS) location solution software. These handsets and the KDDI service plans for wireless navigation represent the first nationwide commercial position location system available anywhere in the world through mobile phone networks.

"KDDI's new GPS Keitai and Movie Keitai handsets, and eznavigation service plans offer our customers state-of-the-art wireless communication and position location tools," said Ikuyoshi Inoue, senior general manager, service and product planning division, business sector of KDDI Corporation. "QCT's MSM3300 chipset and application software solutions are integral to these new products, and we look forward to a continuing partnership with QCT as we continue to bring exciting new products and services to the Japanese marketplace."

Related Quote

QCOM	49.88	-2.40
delayed 20 mins - disclaimer		
Quote Data provided by Reuters		

ADVERTISEMENT



marketplace."

"The launch of gpsOne-enabled handsets and services across Japan by KDDI heralds a new era in CDMA wireless technology, signifying an almost unlimited range of new products and features based on position location capabilities that will become available to consumers," said Don Schrock, president of QUALCOMM CDMA Technologies. "KDDI continues to prove its innovation in the Japanese marketplace by offering its customers the most advanced wireless handsets and services available."

The MSM3300 chipset is comprised of the MSM3300 CDMA modem, RFT3100(TM) analog-baseband-to-RF upconverter, IFR3300(TM) IF-to-baseband downconverter, RFR3300(TM) RF-to-IF downconverter -- the first front-end receiver in the industry to incorporate GPS capabilities in a CDMA chipset -- PA3300(TM) power amplifier, PM1000(TM) power management device and the SURF3300(TM) development platform. QCT's gpsOne technology is integrated on the MSM3300 chip, which provides all of the position location capabilities without the need for additional chips, reducing board space and potential size of the handsets.

QCT's gpsOne solution, featuring SnapTrack(TM) technology, offers robust data availability under the most challenging conditions, whether in concrete-and-steel high-rises, convention centers, shopping malls or urban canyons. Using a hybrid approach that utilizes signals from both the GPS satellite constellation and from CDMA cell sites, the gpsOne solution enhances location services availability, accelerates the location determination process and provides better accuracy for callers, whether during emergency situations or while using GPS-enabled commercial applications. The gpsOne solution deployed by KDDI is supported by SnapTrack's SnapSmart(TM) location server software, which provides the core position calculation function for KDDI's eznavigation service.

The MSM3300 solution also offers the highly integrated features of QCT's Wireless Internet Launchpad(TM) suite of advanced technologies and software, that includes, in addition to the gpsOne position location solution, Bluetooth(TM) connectivity capabilities, UMTS Subscriber Identity Module (SIM), and multimedia features such as Qtunes(TM) Moving Picture Experts Group (MPEG-1) Layer-3 (MP3) player software support and Compact Media Extension (CMX(TM)) Musical Instrument Digital Interface (MIDI)-based multimedia software. The MSM3300 solution also supports QUALCOMM's Binary Runtime Environment for Wireless(TM) (BREW(TM)) applications platform.

The two KDDI GPS Keitai handsets offer users access to the services and functionality provided by the gpsOne technology, with KDDI's eznavigation service providing, initially, 20 different position location features such as personal navigation, communication services, gourmet town guides, transportation assistance, real-time local weather forecasts, security services, information services, and entertainment and games. For more information on the new handsets and services, access the following Internet link: <http://www.kddi.com/english/release/2001/1112/index.html>. For more information on KDDI, visit their Web site at: <http://www.kddi.com/english/index.html>.

QCT (www.cdmatech.com), a division of QUALCOMM Incorporated, is a developer and supplier of CDMA chipsets, hardware and software solutions, and tools, with 175 million cumulative shipments of MSM chips worldwide. QCT offers wireless position location technology by SnapTrack, a wholly owned subsidiary of QUALCOMM. QCT supplies chipsets to the world's leading CDMA handset and infrastructure manufacturers including: Acer Peripherals, Inc.; ALPS ELECTRIC CO., LTD.; CASIO COMPUTER CO., LTD.; FUJITSU LIMITED; Hitachi, Ltd.; Hyundai Electronics Industries Co., Ltd.; KYOCERA CORPORATION; LG Information and Communications, Ltd.; Samsung Electronics Ltd.; SANYO Electric Co., Ltd.; and Toshiba Corporation, among others.

QUALCOMM Incorporated (www.qualcomm.com) is a leader in developing and delivering innovative digital wireless communications products and services based on the Company's CDMA digital technology. The Company's business areas include CDMA chipsets and system software;

technology licensing; the BREW applications platform; Eudora® e-mail software; digital cinema systems; and satellite-based systems including portions of the Globalstar(TM) system and wireless fleet management systems, OmniTRACS® and OmniExpress®. QUALCOMM owns patents that are essential to all of the CDMA wireless telecommunications standards that have been adopted or proposed for adoption by standards-setting bodies worldwide. QUALCOMM has licensed its essential CDMA patent portfolio to more than 100 telecommunications equipment manufacturers worldwide. Headquartered in San Diego, Calif., QUALCOMM is included in the S&P 500 Index and is a 2001 FORTUNE 500® company traded on The Nasdaq Stock Market® under the ticker symbol QCOM.

Except for the historical information contained herein, this news release contains forward-looking statements that are subject to risks and uncertainties, including the extent to which new products and features are developed based upon position location technology, the Company's ability to successfully design and have manufactured significant quantities of CDMA components on a timely and profitable basis, the extent and speed to which CDMA is deployed, change in economic conditions of the various markets the Company serves, as well as the other risks detailed from time to time in the Company's SEC reports, including the report on Form 10-K for the year ended September 30, 2001, and most recent Form 10-Q.

QUALCOMM, OmniTRACS, OmniExpress and Eudora are registered trademarks of QUALCOMM Incorporated. MSM, MSM3300, gpsOne, RFT3100, IFR3300, RFR3300, PA3300, PM1000, SURF3300, SnapTrack, Qtunes, CMX, Wireless Internet Launchpad and BREW are trademarks of QUALCOMM Incorporated. SnapSmart is a trademark of SnapTrack, Inc. Globalstar is a trademark of Loral QUALCOMM Satellite Services, Incorporated. Bluetooth is a trademark owned by Telefonaktiebolaget L M Ericsson, Sweden. All other trademarks are the property of their respective owners.

Contact:

QUALCOMM Incorporated
Anita Hix, CDMA Technologies Public Relations
858/658-5879, Fax: 858/845-7435
ahix@qualcomm.com

or
Patty Goodwin, Corporate Public Relations
858/651-4127, Fax: 858/651-5873
pgoodwin@qualcomm.com

or
Julie Cunningham, Investor Relations
858/658-4224, Fax: 858/651-9303
jcunningham@qualcomm.com

[Email this story](#) - [Most-emailed articles](#) - [Most-viewed articles](#)

More Quotes and News: [Qualcomm Inc \(NasdaqNM:QCOM - news\)](#)

Related News Categories: [computer hardware](#), [computers](#), [internet](#), [publishing](#), [software](#), [telecom](#)

[Help](#)

Copyright © 2001 Yahoo! Inc. All rights reserved. [Privacy Policy](#) - [Terms of Service](#)
Copyright © 2001 Business Wire. All rights reserved. All the news releases provided by Business Wire are copyrighted. Any forms of copying other than an individual user's personal reference without express written permission is prohibited. Further distribution of these materials by posting, archiving in a public web site or database or redistribution in a computer network is strictly forbidden.

[Questions or Comments?](#)


[News Home](#) - [Yahoo!](#) - [Help](#)

[Home](#) [Top Stories](#) [Business](#) [Tech](#) [Politics](#) [World](#) [Local](#) [Entertainment](#) [Sports](#) [Op/Ed](#) [Science](#) [Health](#) [Full](#)

Business - NewsFactor

[Reuters](#) | [AP](#) | [The New York Times](#) | [TheStreet.com](#) | [Videos](#) | [Forbes.com](#) | [ABCNEWS.com](#) | [News More ...](#)

Thursday December 20 01:23 PM EST

Qualcomm Debuts First Position-Location Mobile Phones

By Dan McDonough, Jr., [Wireless.NewsFactor.com](#)

Qualcomm (Nasdaq: QCOM - news) is introducing three GPS-enabled mobile phones this month as part of KDDI's new GPS service in Japan. This is the first system in the world that allows for position location using mobile phone networks, according to Qualcomm.

Related Quotes

QCOM	49.961	-2.319
DJIA	10006.56	-63.93
S&P 500	1144.14	-5.42
NASDAQ	1927.73	-55.16
^PSE	681.79	-17.12
^NIX	142.52	-7.03

delayed 20 mins - [disclaimer](#)



- [Can You Smell What Qualcomm and the WWF Are Cooking?](#)
- [Qualcomm Joins Eutelsat in Euro Transportation Industry](#)
- [Qualcomm Pours \\$266M into Shaky Brazilian Wireless Company](#)

"By the end of the first quarter, 2002, we expect four handset vendors to be shipping gpsOne handsets in the U.S.," Qualcomm spokeswoman Stacy O'Brien told Wireless NewsFactor. "Currently, there are over 20 CDMA (news - web sites) handset manufacturers developing and selling gpsOne-enabled handsets worldwide."

The phones that will go into service this month are from Qualcomm's gpsOne line -- including the C3001H, the C3002K and the C5001T. They run on the CDMA (code division multiple access) wireless platform, which Qualcomm maintains will open the doors to all sorts of new applications.

O'Brien explained that the phones themselves are manufactured by third parties, but Qualcomm builds the technology that rests in the chipset of the phone. "Over 30 carriers on three continents have trialed SnapTrack/gpsOne technology in the past three years on all major air interfaces," O'Brien said.

GPS Gaining Interest

"The launch of gpsOne-enabled handsets and services across Japan by KDDI heralds a new era in CDMA wireless technology, signifying an almost unlimited range of new products and features based on position-location capabilities that will become available to consumers," Qualcomm CDMA Technologies president Don Schrock said.

Probably the closest system to this technology comes from a partnership between Ericsson

(news - web sites) and Chapman Technologies. In October, Chapman said it began developing GPS features for an add-on to Ericsson's new T60c mobile phone. And the GPS add-on is scheduled to be launched any day now.

The Chapman system, though, is not an integrated part of the phone. This GPS functionality derives from a detachable Smartback device that syncs with the new Ericsson handset -- which operates on CDMA 2000 1X networks.

Conversely, Qualcomm's integrated phone is powered not by an add-on, but by its MSM3300 (mobile station modem) chipset. Using just one chip for the entire system helps to reduce board space and keeps the handsets from starting to look like those bulky 1980s cell phones.

Chapman president Laurence Sack told Wireless NewsFactor in October that the complete system -- the phone and the GPS add-on -- was priced at about US\$299. Monthly service for GPS monitoring was priced at about \$9.95.

Handling Tough Scenarios

Qualcomm said it built a versatile system in its gpsOne technology -- fully aware that it would not be relegated to rural use. In fact, Qualcomm said one of the key components of the system, its SnapTrack technology, allows the system to work even under tough circumstances -- such as when the user is in high-rises enveloped by concrete and steel or squarely in the middle of a shopping mall or convention center.

The system uses signals from both GPS satellites and CDMA cell sites to quickly determine the location of a user. This is an important function for emergency situations, but it also has vast commercial applications, too.

Where is the closest restaurant? How do I find the bus terminal from here? Help! I need a restroom! These are all scenarios that can be solved through GPS services on a mobile phone. And the KDDI GPS service will offer about 20 applications to start -- including gourmet town guides, transportation assistance, security services, and entertainment and games.


[Email this story](#) - [View most popular](#) | [Printer-friendly format](#)

Archived Stories by Date:

Dec 19

News Resources

 [Message Boards: Post/Read Msgs](#)

 [Conversations: Start a live discussion](#)

 [News Alerts: CDMA | Ericsson | Qualcomm Inc](#)
More Alerts: [News Bulletins](#), [News](#), [Mobile](#), [Stocks](#)

ADVERTISEMENT

Weekly Specials

- [Subscribe to USA TODAY and get a FREE 3x5 foot American Flag](#)
- [Mortgage Rates Drop Again! Refinance Now!](#)
- [Get Free DVD Rentals](#)
- [Search for Free College Money](#)
- [FREE credit report & trial membership!](#)

KDDI Corporation
Okinawa Cellular Telephone Company

KDDI To Launch Next-Generation au Services Across Japan in December

Sales of New GPS Keitai and Movie Keitai to Start Simultaneously

Tokyo, November 12, 2001 -- KDDI Corp. and Okinawa Cellular Telephone Company are due to launch new cellular phone services across Japan from December this year. eznavigation, a GPS navigation system, and ezmovie, a moving image transmission system, will be the first services of their kind available in Japan's mobile phone networks. The third new service, an all-new au cellular phone service compatible with the mobile Internet standard WAP2.0, will be the first of its kind anywhere in the world.

Accompanying the new services will be two new cellular phone units. The GPS Keitai will give users all the services and functionality required to use the GPS to determine their exact location. For its part, the Movie Keitai will give users access to the moving image service outlined above. Movies will come complete with stereo sound, and will be available anywhere, anytime, for extremely reasonable prices.

Sales of the new phone units are to commence in early December. Customers will be able to choose from different models of GPS Keitai, the C3001H and the C3002K, though only one model, the C5001T, will be available for the Movie Keitai. At the start of the services, GPS services will offer customers approximately 20 different contents, with moving image services totaling approximately 60.

Both new services have a special promotional campaign that runs until March 2002. This promotion will give customers access to high-speed packet services, which normally incur a monthly charge of 600 yen, for through a set discount.

Further details of the new services are listed below.

1. Main Characteristics

New cellular phone units	GPS Keitai C3001H C3002K	Movie C5001T
Compatible with nationwide cdmaOne packet communications network		○
eznavigation functions		○
ezmovie functions (max speed: 64Kbps)	-	○
More advanced ezplus Java-compatible functionsUtilization of eznavigation positional information in other applications		○
WAP2.0-compatible Access to unofficial i-Mode sites		○

Note: Java and related products and services are the trademarks and registered trademarks of Sun Microsystems, Inc.
global network

2.eznavigation functions

- (1) Main characteristics - Utilization of high-accuracy positional information in other applications
 - Navigation systems to date have relied on signals sent out from transmission bases. eznavig incorporates signals from the GPS satellite network into the system to provide more accurate time location information.
 - The new system uses three different GPS signals to ensure that location information is accurate within a few meters.
 - GPS signals may not be able to reach users when they are inside or underground. In such cases, signals from as many as 20 transmission bases will be coordinated to continue to determine locations. It should be noted that accuracy suffers in such adverse circumstances.
- (2) Usage Method
 - The wide range of contents offered by this new service is accessible from EZweb's eznavi menu. Through this menu customers can access paid content from a large variety of companies such as map functions, gourmet town guides, communications services, traffic information, weather reports and emergency information.
 - In addition to route information based on current location, customers will now be able to receive e-mails containing details of individual destinations. Maps and location-dependent virtual pet also be available. On a more serious note, families will be able to check on the location of family members, and emergency signals can be sent out should the need arise. These functions provide customers with an unprecedented level of contact among families and friends.
- (3) Initial number of contents available (due to undergo steady expansion)
20 (see list at end of press release)

3.ezmovie functions

- (1) Main characteristics - Smooth moving images, stereo sound, hyperlink-compatible to movie creation
 - EZweb's data transmission speeds will be speeded up to a maximum of 64Kbps. At the same time, smooth moving image transmission will be made possible through the use of the MP4 file format. This format combines a number of global standard compression algorithms: the MPEG4 algorithm used for moving image compression, and the MP3 and QCELP algorithms used in sound and music compression. High-quality stereo sound is one of the many benefits of this technological combination.
 - Hyperlink-compatible movie creation functions will combine with the new services to broaden the range of communication services accessible from video contents. Interactive e-commerce is an area that can be expected to make particular gains as a result.
Note: QCELP is a registered U.S. trademark of Qualcomm
- (2) Usage
 - Contents offered by this new service are accessible from EZweb's ezmovie menu. This menu is within easy reach both paid and free contents from a large variety of providers, such as movies, music, news, weather reports, and contents relating to cartoon characters, sports, fashion, celebrities, comedy and entertainment.
 - Sites offering contents for the new service provide users with high-quality video contents in more than a minute. Be it the latest chart information or news highlights, content is available anywhere, anytime, for extremely reasonable prices.
- (3) Initial number of contents available (due to undergo steady expansion)
60 (see list at end of press release)

4.Advanced ezplus Java-compatible functions

- (1) Main characteristics - Supports HTTP transfers, makes possible data transfers via servers
 - With the introduction of the new service, ezplus functions, first introduced in July and previously capable of dealing with applications of a maximum size of 50Kb, will be greatly expanded. New versions will support standard HTTP file transfer protocol, a change that will allow data transfer between cellular phone units and servers.
 - As a result of the above, two-player computer games and other communicative activities will become possible via servers. Moreover, application data can be updated automatically, allowing timely access to the latest news, weather reports and other similar contents.
 - Mobile agent functions are another new option. Users can use these functions to send out agent control programs, which automatically collect required information from servers.
 - Other new functions will allow the eznavigation location information to be utilized by other applications, creating an even more interactive user environment than ever before.
- (2) Initial number of contents available (due to undergo steady expansion)
20* (see list at end of press release)
Total number of ezplus services to date: 41
 - * This figure includes those services that make use of eznavigation functions

5.WAP2.0 features

Compatible with XHTML, the next-generation global standard

- WAP2.0, adopted by the WAP forum, is the global standard for mobile Internet applications that require XHTML support. It is due to be introduced as the platform for EZweb, and, through it, eznavigation, ezmovie and ezplus. Compatibility will also be maintained with WML (Wireless Language) and HDML (Handheld Device Markup Language) the predecessors to XHTML in this respect.

Superlative security features

- The adoption of the WAP2.0 standard will boost integration of the new services with the Internet large. TLS (Transport Layer Security) is an integral part of WAP2.0 encryption protocols, and the system is also compatible with SSL (Secure Socket Layer) security, fast becoming the de facto within the industry. These features allow WAP2.0 to provide the extremely secure communication environment required by banking, credit settlement, shopping and other applications.

Allows access to unofficial i-Mode sites

- Both the GPS Keitai and the Movie Keitai are WAP2.0-compatible. As such, they not only allow access to existing EZweb content, but to unofficial i-Mode HTML sites. It should be noted how that the unique i-Mode users' environment will not be maintained when viewing unofficial sites

6.Charges

(1) Main Points

- EZwebmulti, a new EZweb service course, will be introduced for GPS Keitai and Movie Keitai customers.
- The high-capacity data transmission required by the eznavigation, ezmovie, and ezplus service available with EZwebmulti will be available at even more favorable prices than existing options such as EZweb@mail.

(2) Monthly Fees

EZwebmulti

Monthly fee	300 yen
-------------	---------

High-speed packet service

Monthly fee	600 yen
-------------	---------

Note: High-speed packet service is the new name for PacketOne64 services. The new name will come into effect December of this year.

Discount on EZwebmulti and high-speed packet service set

Monthly fee	High-speed packet service available free until end of special campaign in March 2002 (standard monthly fee: 600 yen).	300 yen
	Standard discount (200 yen discount)	700 yen

- Those customers who sign up for EZwebmulti and high-speed packet services at the same time gain access not only to high-speed data transfer at a maximum of 64Kbps, but also to an identical maximum transfer rate when using EZweb from Movie Keitai units. This results in a significant increase in the quality of moving image services.
- Simultaneous sign-up for the above two services also result in a 200-yen discount on the monthly fee.
- Those customers signing up for both services before the end of March 2002 will receive an additional larger discount, resulting in a monthly fee of only 300 yen. During the promotional period the monthly usage fee for High Speed Packet services will be free.

(3) EZwebmulti Packet Communication Fees

EZwebmulti	EZ Internet Service (eznavigation, ezmovie, ezplus and other EZ Internet services)			E-mail
	Reduced Fee Period (1:00~17:00)		Standard (17:00~1:00)	0.27 yen/packet
	Up to 100 packets per access	More than 100 packets per access	Uniform	
	0.2yen / packet	0.1 yen /packet	0.27 yen/packet	
(Reference) EZweb@mail	0.27 yen/packet			

* 1 packet = 128 byte 1 access = 1 page or 1 transmission

* Fees are 0.27 yen/packet when determining position with eznavigation or utilizing SSL/TLS communications.

* Those customers accessing paid contents on other sites will be required to pay the relevant providers additional fees not covered here.

Discount Options - PacketOne Middle and Super Packs

	Set Fee	Free Usage Amount	Discount Rate on Extra Usage
PacketOne Middle Pack	2,400 yen/month	10,000 yen/month	70%
PacketOne Super Pack	8,500 yen/month	45,000 yen/month	80%

- Reduced Fee Time on EZ Internet (including eznavigation, ezmovie and ezplus) is from 1:00 to 17:00.

Reduced Fee Time fees are also available whenever customers download more than 100 pa data in a single access. This special reduction was conceived of to allow customers wider ac data-intensive contents.

- Under Reduced Fee Time fees, a 10KB map could therefore be downloaded with packet communication fees of 16 yen, and fees for a 100KB video clip would come to 88 yen. Taki of the PacketOne options outlined above will allow customers to reduce packet communicat fees even further.

Packet communication fees under the PacketOne Middle Pack

- A total of 625 10KB maps of 16 yen each could be downloaded with a free usage amount o 10,000 yen.
→ A set fee therefore yields a fee of approximately 4 yen per download.
- A total of 113 10KB maps of 88 yen each could be downloaded with the same free usage a of 10,000 yen.
→ A set fee of 2,400 yen therefore yields a fee of approximately 21 per download.

7.Service Commencement Date

Early December, 2001 (planned). This will coincide with the first sales of the new cellular phone u

8.New Cellular Phone Units Compatible with the New Service

(1) C3001H

KOKO SECOM EZ-Compatible Model

- Compatible with KOKO SECOM EZ, which provides positional information, emerg signal and dispatch of staff services.

A wide range of services is available from SECOM Co., Ltd. in this respect, such as immediate dispatch of staff to customers who have activated emergency signal func (This service requires separate applications and charges payable to SECOM Co., Ltd.)

- 1Mb Data Folder

Melodies, images, games and other downloads are stored in a memory approximate in size, the largest such memory available in a cdmaOne cellular phone. This capaci allows customers to save more than 20 ezplus applications of 50Kb size.

- Large-scale dynamic speakers

Large-scale speakers in the back of the unit allow impressive audio accompaniment games and other activities.

- 'ATOK for au' Japanese Conversion System

The 'ATOK Pocket for Mobile Phone' Japanese Conversion System installed in the C451H cellular phone is now available in this new unit, in a new improved version. Entering a single character now results in a pop-up display showing all words used that begin with the same character, thereby allowing text to be entered much more quickly. A total of 14,000 commonly used and currently fashionable words have als added to the system database, for a total of 98,000 words.

- 4,096-Color TFD-LCD Display

The unit boasts a TFD-LCD display, which combines high picture quality with

exceptional speed of response. Maps obtained through eznavigation scroll particular smoothly with this screen, and ezplus games also benefit from the unusually clear d

■ Side Illumination

Illumination is provided by a new advanced light, carefully integrated with the unit piece. The light glows a deep blue when the unit receives phone calls or is active wi location-determining services.

■ Color Options

The new unit is to be available in three different colors: silver, black and scarlet.

Product Name	cdmaOne C3001H	Manufacturer	Hitachi Co.
Size	W44×H130×D19mm	Weight	86 g
Continuous Talk Time	200 minutes	Continuous Standby Time	220 hours
Recharging Time	100 minutes	Color	Silver/Black/Scarlet
No. of Screen Dots	Width 120× Length 162	Data Folder Capacity	1 MB
E-Mail Outbox Capacity	100 KB or 100 items	E-Mail Inbox Capacity	200 KB or 200 items
Initial Sales Date (Planned)	Beginning of December	RRP	Open price

(2) C3002K (Winner of the 2001 Good Design Prize)

A Stylish Model Offering Exceptional Clarity of Image

■ Aluminum body

The aluminum panels of which this model is made provide customers with the high quality and stylish metallic feel that other materials simply cannot match.

■ 65,536-Color GF LCD Display

The unit boasts a 65,536-color GF (Glass Fine) LCD screen, which delivers high co and extremely high image quality. The screen is compatible with the JPEG format, the most commonly used image compression formats.

■ Improved character display

Phone numbers, phone call times and history and re-dial functions are displayed wit ×24 dot characters for extra ease of use. Data is accessible with a single glance.

■ WnnV2 Japanese Conversion Software

This software provides a wide range of functions, ranging from quick memory opti complete sentence conversion for commonly used phrases. Colloquial language can converted without difficulty, making e-mails easier to compose and send than ever Dictionaries used range from the most basic to more specialist options providing ac place names, company names and public facilities. A total of 64,600 words are inst standard, including abbreviations and currently fashionable words.

■ Notification light

The unit includes a three-colored (blue, green and red) LED that flashes when certai types of data are received. Different combinations of flashes indicate whether the re data is a voice message, an e-mail, a c-mail, or a talk mail.

Product Name	cdmaOne C3002K	Manufacturer	Kyocera Corp.
Size	W48×H98×D22mm	Weight	100 g
Continuous Talk Time	200 minutes	Continuous Standby Time	230 hours
Recharging Time	100 minutes	Color	Silver/Black
No. of Screen Dots	Width 128 x length 160	Data Folder Capacity	500 KB
E-Mail Outbox Capacity	128KB or 120 items	E-Mail Inbox Capacity	256 KB 250 items
Initial Sales Date (Planned)	Beginning of December	RRP	Open price

(3) C5001T (Winner of the 2001 Good Design Prize)

Flagship model of the new range, offering high-quality MPEG4 playback with stereo so

■ Video Playback Functions

The model's superlative playback functions allow users access to the wide range of ezmovie video content at 15 frames per second. Picture quality is also extremely high thanks to the QCIF (144×176 dot) moving images size. Video transmission reaches maximum speeds of 64Kbps for those customers signed up with high-speed packet services.

■ 4,096-Color Low-Temperature Polysilicon TFT LCD Screen

This quick-response screen lets users enjoy high-clarity video clips. The expressiveness of the screen's excellent contrast and vivid colors is immediately apparent.

■ Digital Stereo Sound

Digital stereo sound, accessible through a stereo earphone microphone which comes standard with the unit, adds a new dimension to video clips.

■ Crystal Illumination

The seven-color light installed in the back of the unit flashes to let users know when phone calls and e-mails arrive. Different colors and patterns can be set for different acquaintances, letting users know callers' identities without even opening the unit.

Product Name	cdmaOne C5001T	Manufacturer	Toshiba Corp.
Size	W47×H96×D24mm	Weight	98 g
Continuous Talk Time	150 minutes	Continuous Standby Time	200 hours
Recharging Time	130 minutes	Color	Silver/Navy/White
No. of Screen Dots	Width 144 x Length 176	Data Folder Capacity	800 KB
E-Mail Outbox Capacity	100 KB or 200 items	E-Mail Inbox Capacity	200 KB or 200 items
Initial Sales Date (Planned)	Beginning of December	RRP	Open price

9. Peripheral Devices

The following peripheral devices are due to go on sale along with the GPS and Movie Keitais: the controller, the first cellular phone game controller to go on sale in Japan; a Bluetooth adaptor that wireless data transmission with cdmaOne cellular phones; and MySync, a program allowing PIM other data to be transmitted and synchronized between cellular phones and personal computers.

(1) ezplus Controller

- Connecting the ezplus controller up to a cellular phone allows users to interact with content more easily. A 4-way controller and four keys provide users with a control setup similar to used in modern games consoles. Needless to say, this makes game content, especially shoot games, far more accessible than in the past.
- The controller uses four arms to stabilize the cellular phone in question, a design which makes it compatible with a wide range of units.
- The controller boasts great ease of use, activating immediately on being plugged into a cell phone. Moreover, the power supply switches off automatically after being left unused for a period of five minutes, contributing greatly to efficiency of battery usage.

Product Name	ezplus controller
Size	W145×H30×D60mm
Power Supply	CR2032button batteries x 2
Initial Sales Date (Planned)	Beginning of December

Manufacturer	Hori Co.,Ltd
Weight	105 g
Color	Black
Continuous Usage Time	100 hours
RRP	2,600 yen

Note: The controller is to be compatible with the C5001T, C3001H, C3002K, C452CA models, and future ezplus compatible models.

(2) Bluetooth™ Adaptor

- Uses the Bluetooth protocol to make wireless data transmission possible through simple attachment to a cdmaOne cellular phone.
- Allows wireless dial-up connections to be made from personal computers even when on the move.
- In conjunction with the attached MySync software, the adaptor enables the transmission of PIM and other data between cellular phones and personal computers.

Product Name	Bluetooth™Adaptor
Size	W42×H76×D21mm
Color	Silver
Continuous Transmission Time	2 hours
Bluetooth Standard	Bluetooth Specification v 1.1
Transmission Range	10m
Initial Sales Date (Planned)	Beginning of December

Manufacturer	TDK Corporation
Weight	48g(Battery included)
Power Supply	Lithium Ion 300mAh (AC Adapter included)
Recharging Time	2 hours
Output Level	Class3(MAX1 mW)
Maximum Transmission Rate	64 k b p s (Packet transmission)
RRP	Open Price

* Bluetooth™ is a globally accepted wireless transmission protocol which allows data transmission between devices.

between cellular phones, PCs and other compatible devices. BluetoothTM is a registered trademark. KDDI Corporation, Okinawa Cellular Telephone Company and TDK Corporation license the technology under license.

- * Due to be compatible with C5001T, C3001H, C3002K, C1001SA and C1002S models, the Series, the C300 Series, and all models released in future.
- * Please consult the appropriate homepage for other important issues relating to the use of this product.

(3) MySync

- This software allows PIM and other data (used in address books, schedules, task lists and the like) to be transmitted and synchronized between cellular phones and personal computers. Its advanced functionality does away with the nuisance of having to input data into both cellular phones and PCs.
- A wide range of options are made possible by the new software: downloading PIM data saved on a PC onto a cellular phone; transferring other files created and edited on PCs in the same manner; and backing up cellular phone data on PCs for safety. It should be noted that copyrighted information cannot be transferred in this manner.
- A serial cable for connecting phone unit to PC is included with the software CD-ROM. However, only one such cable is provided when the software is bought as part of the BluetoothTM package.
- On-screen instructions make installation simple.
- Data synchronization is also straightforward. Once the cellular phone and PC in question are connected, users only need to start the program up and select the necessary options.
- PIM data synchronization can be conducted all at once or by item, in line with user preferences.

Product Name	MySync	Manufacturer	CACIO SOFT Co.,Ltd
Operating System	Windows98, 98SE, WindowsME, WindowsNT4.0SP3 and over Windows2000	Applications	Microsoft Outlook97/98 /2000/ Not for use with 2002(OutlookExpress)
Compatible PCs	Any with the above OS	Memory Requirement	More than 64MB
Compatible CPUs	Pentium and over	Hard Disc Requirements	1 GMB
Display	More than 256 colors SVG A(800X600)/	Port	Serial Port(RS232C, D-sub9 pin)
Initial Sales Date (Planned)	Beginning of December	RRP	3,400 yen

- * Due to be compatible with C5001T, C3001H, C3002K, C1001SA and C1002S models, the Series, the C300 Series, and all models released in future.
- * When using a serial cable.
- * Please consult KDDI homepage for other important issues relating to the use of this product.

Copyright (C) 2001 KDDI CORPORATION All Rights Reserved.